

What is claimed is:

1. An optical disk recording apparatus for recording information onto an optical disk having a wobbled recording track by irradiation of a recording light beam having power modulated in accordance with a recording signal, said optical disk recording apparatus comprising a push-pull signal processing circuit including:

sub a a push-pull signal generation circuit arranged to generate a push-pull signal on the basis of a reflected-light detection signal representative of a reflection of the recording light beam off the optical disk; and

a gain variation circuit arranged to vary gain of either the reflected-light detection signal or the push-pull signal generated by said push-pull signal generation circuit in response to modulation of the recording light beam, to thereby suppress a level variation of the push-pull signal caused by the modulation of the recording light beam.

2. An optical disk recording apparatus as claimed in claim 1 wherein said gain variation circuit varies the gain of the reflected-light detection signal or the push-pull signal between a mark forming section and a blank forming section of the recording signal.

3. An optical disk recording apparatus as claimed in claim 2 wherein said gain variation circuit varies the gain, in response to the mark forming section of the recording signal, in accordance

sub a1
cont with a time-axial length of the mark forming section.

4. An optical disk recording apparatus as claimed in claim 1 which further comprises a wobble extraction circuit including a filter circuit arranged to extract a wobble signal component out of an output signal of said push-pull signal processing circuit.

5. An optical disk recording apparatus as claimed in claim 1 which further comprises a pre-pit detection circuit including a comparator arranged to compare an output signal of said push-pull signal processing circuit with a predetermined threshold value for detection of a pre-pit formed in the optical disk.

6. An optical disk recording apparatus as claimed in claim 5 wherein said pre-pit detection circuit includes:

a first peak value detection circuit arranged to detect a peak value of the output signal of said push-pull signal processing circuit;

sub a2 a filter circuit arranged to extract the wobble signal component out of the output signal of said push-pull signal processing circuit;

a second peak value detection circuit arranged to detect a peak value of an output signal of said filter circuit; and

a threshold value setting circuit arranged to set, as the threshold value, an optionally-selected value between the peak value detected by said first peak value detection circuit and the peak value detected by said second peak value detection circuit.